



Sandia National Laboratories

Sandia grew out of America's World War II effort to develop the first atomic bombs. Today, keeping the U.S. nuclear stockpile safe, secure and effective is a major part of Sandia's work as a multidisciplinary national security, engineering laboratory. But Sandia's role has evolved to address the additional complex threats facing our country. Sandia carries out research and development in:

Nuclear Deterrence – Supporting U.S. deterrence policy by helping assess, secure and sustain the nuclear arsenal.

National Security Programs – Supplying new capabilities to U.S. defense and national security communities.

Defense Nuclear Nonproliferation – Developing systems to monitor emerging threats, protecting nuclear assets and materials, and addressing nuclear emergency response and nonproliferation worldwide.

Energy & Homeland Security – Ensuring stable energy resources, protecting the grid and physical infrastructure, and helping protect the nation against nuclear, radiological, chemical and biological threats.

Advanced Science & Technology – Fundamental science to promote national security, economic competitiveness and improved quality of life.

Sandia's science, technology and engineering foundations enable our unique mission. The laboratory's highly specialized research staff is at the forefront of innovation, collaborating with universities and companies and performing multidisciplinary science and engineering research programs with significant impact on U.S. security.

People

Sandia's staff of about 14,100 includes more than 6,650 with advanced degrees.



*Exceptional service
in the national interest*

Sandia people work at the laboratories' headquarters in Albuquerque, New Mexico; at a second lab in Livermore, California; and at other sites including Carlsbad, New Mexico; Las Vegas and Tonopah, Nevada; Amarillo, Texas; and Kauai, Hawaii.

Budget

Sandia's operating costs were about \$3.7 billion in fiscal year 2018.

Capabilities

Meeting tomorrow's national security challenges will require readiness, excellence in engineering and rapid innovation. Sandia will help the nation solve significant problems with core capabilities in:

- Systems engineering and integration
- High-performance computing, as well as modeling and simulation
- Extreme-environment testing at unique facilities
- Nanotechnologies and microsystems

Collaboration

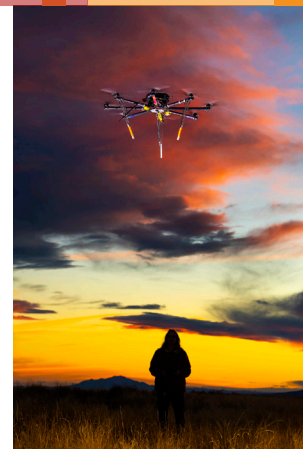
Sandia's customers and collaborators include many federal, state and local agencies, companies and academic institutions. Partnerships are formed through cooperative agreements, licensing, technical assistance,

centers of excellence, use of unique Sandia facilities, personnel exchanges and other mutually beneficial arrangements.

Achievements

Sandia has pioneered such products as cleanrooms for microelectronics manufacturing, triggers for automobile airbags and high-resolution radars that see through clouds and darkness. Recent achievements include:

- Major NNSA nuclear weapons programs executed on time and on budget.
- Satellite sensors that help the nation monitor worldwide nuclear activity from space
- A device, known as the Air Bearing Heat Exchanger, or "Sandia Cooler," with the potential to dramatically alter the electronics chip-cooling landscape in computing
- New technology that dramatically improves the endurance of legged robots to aid in disaster response



Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International, Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA-0003525. SAND2020-1266 M.



**Sandia
National
Laboratories**